

Amendments to the Claims:

Please amend claims 1, 4-7, 11, 12 and 14, cancel claim 2 and add claims 15-23 as shown in the following listing of claims. This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) Device for determining the level of an input signal intended to be applied to a receiving system, said receiving system comprising arranged in series a set of discrete gain amplifiers, a selective filter, a mixer, said receiving system being intended to deliver an output signal, said device comprising:

measuring means for measuring the level of said output signal in a given frequency channel ~~to produce successive measurements of the level of said output signal in said given frequency channel and calculating an average of said successive measurements of the level of said output signal in said given frequency channel,~~

means for determining the real gain of said set of amplifiers in said given frequency channel, wherein a gain of each amplifier in said set of amplifiers is determined by determining a deviation from a nominal gain value of each of said amplifiers in said given frequency channel,

means for determining the real gain of said selective filter in said given frequency channel, wherein the real gain of said selective filter is given by a set of equations for different ranges of frequency channels, wherein each of the equations is used for a unique range of frequency channels; and

calculation means for deriving a digital measure of the level of the input signal from the level of the output signal, the real gain of said set of amplifiers and from the real gain of said selective filter.

2. (canceled)

3. (canceled)

4. (currently amended) Device as claimed in claim ~~2~~ 1 comprising additional means for rounding the level of said input signal to the nearest half value.

5. (currently amended) Device as claimed in claim ~~4~~ 1, wherein the deviation from said nominal gain of each amplifier in said set of amplifiers is given by a look-up table having a first input corresponding to said given frequency channel, and a second input corresponding to the nominal gain of said corresponding amplifiers.

6. (currently amended) Device as claimed in claim ~~5~~ where 5, ~~wherein~~ wherein said measuring means ~~comprise~~ comprises a selective filter for selecting said given frequency channel, a logarithmic detector and an analog-to-digital converter for delivering the level of said output signal in said given frequency channel.

7. (currently amended) Method for determining the level of an input signal intended to be applied to a receiving system, said receiving system comprising arranged in series a set of discrete gain amplifiers, a selective filter, a mixer, said receiving system being intended to deliver an output signal, said method comprising:

a measuring step for measuring the level of said output signal in a given frequency channel ~~to produce successive measurements of the level of said output signal in said given frequency channel and calculating an average of said successive measurements of the level of said output signal in said given frequency channel,~~

a processing step for determining the real gain of said set of amplifiers in said given frequency channel, wherein a gain of each amplifier in said set of amplifiers is determined by determining a deviation from a nominal gain value of each of said amplifiers in said given frequency channel,

a first calculation step for determining the real gain of said selective filter in said given frequency channel, ~~wherein said selective filter gain for each of said frequency channels is given by a set of equations defined by a set of coefficients specified for each of said frequency channels wherein the real gain of said selective filter is given by a set of equations for different ranges of frequency channels, wherein each of the equations is used for a unique range of frequency channels,~~

a second calculation step for deriving a digital measure of the level of the input signal from the level the output signal, from the real gain of said set of amplifiers and from the real gain of said selective filter.

8. (previously presented) Receiving box for multimedia signals or modem comprising a device as claimed in claim 1.

9. (original) Signal generated by the method as claimed in claim 7, said signal indicating the level of the input signal.

10. (canceled)

11. (currently amended) Device as claimed in claim 2, wherein the set of equations comprises:

$$Y = -7.0258 \cdot 10^{-8} X^4 + 5.0247 \cdot 10^{-5} X^3 - 1.3011 \cdot 10^{-2} X^2 + 1.1268 \cdot X - 30.8,$$

when $0 < X < 420$ MHz;

$$Y = -1.6317 \cdot 10^{-11} X^4 + 3.0699 \cdot 10^{-7} X^3 - 4.9971 \cdot 10^{-4} X^2 + 0.24851 \cdot X - 43.94,$$

when $420 < X < 840$ MHz; and

$$Y = -6.3403 \cdot 10^{-10} X^4 + 1.666 \cdot 10^{-6} X^3 - 1.6353 \cdot 10^{-3} X^2 + 0.70595 \cdot X - 122.85,$$

when $X > 840$ MHz,

where X is one of said frequency channels and Y is the real gain of said selective filter for said frequency channel X.

12. (currently amended) Device as claimed in claim 1, wherein said measuring means is ~~further configured to produce said successive measurements of the level of said output signal in said given frequency channel in decibels~~ configured to produce successive measurements of the level of said output signal in said given frequency channel and to calculate an average of said successive measurements of the level of said output signal in said given frequency channel.

13. (previously presented) The method of claim 7, wherein the set of equations comprises:

$$Y = -7.0258 * 10^{-8} X^4 + 5.0247 * 10^{-5} X^3 - 1.3011 * 10^{-2} X^2 + 1.1268 * X - 30.8,$$

when $0 < X < 420$ MHz;

$$Y = -1.6317 * 10^{-11} X^4 + 3.0699 * 10^{-7} X^3 - 4.9971 * 10^{-4} X^2 + 0.24851 * X - 43.94,$$

when $420 < X < 840$ MHz; and

$$Y = -6.3403 * 10^{-10} X^4 + 1.666 * 10^{-6} X^3 - 1.6353 * 10^{-3} X^2 + 0.70595 * X - 122.85,$$

when $X > 840$ MHz,

where X is one of said frequency channels and Y is the real gain of said selective filter for said frequency channel X.

14. (currently amended) The method of claim 7, wherein the measuring step ~~further comprises measuring the level of said output signal in the given frequency channel to produce successive measurements of the level of said output signal in said given frequency channel in decibels~~ comprises producing successive measurements of the level of said output signal in said given frequency channel and calculating an average of said successive measurements of the level of said output signal in said given frequency channel.

15. (new) Device as claimed in claim 1, wherein each of the equations is defined by a set of coefficients.

16. (new) Device as claimed in claim 15, wherein the set of coefficients is derived from a calibration previously made on the selective filter.

17. (new) Device as claimed in claim 15, wherein each of the equations is a polynomial function of a frequency channel, wherein the polynomial function is defined by the set of coefficients.

18. (new) Device as claimed in claim 15, wherein the set of equations comprises:

$$Y = C_{14} * X^4 + C_{13} * X^3 + C_{12} * X^2 + C_{11} * X + C_{10},$$

when X is in a first range of frequency channels;

$$Y=C_{24}*X^4+C_{23}*X^3+C_{22}*X^2+C_{21}*X+C_{20},$$

when X is in a second range of frequency channels; and

$$Y=C_{34}*X^4+C_{33}*X^3+C_{32}*X^2+C_{31}*X+C_{30},$$

when X is in a third range of frequency channels,

where X is one of said frequency channels, Y is the real gain of said selective filter for said frequency channel X and C_{14} , C_{13} , C_{12} , C_{11} , C_{10} , C_{24} , C_{23} , C_{22} , C_{21} , C_{20} , C_{34} , C_{33} , C_{32} , C_{31} and C_{30} are coefficients.

19. (new) Device as claimed in claim 15, wherein the selective filter is configured to suppress high-order harmonics in the input signal.

20. (new) The method of claim 7, wherein each of the equations is defined by a set of coefficients.

21. (new) The method of claim 20, wherein the set of coefficients is derived from a calibration previously made on the selective filter.

22. (new) The method of claim 20, wherein each of the equations is a polynomial function of a frequency channel, wherein the polynomial function is defined by the set of coefficients.

23. (new) The method of claim 20, wherein the set of equations comprises:

$$Y=C_{14}*X^4+C_{13}*X^3+C_{12}*X^2+C_{11}*X+C_{10},$$

when X is in a first range of frequency channels;

$$Y=C_{24}*X^4+C_{23}*X^3+C_{22}*X^2+C_{21}*X+C_{20},$$

when X is in a second range of frequency channels; and

$$Y=C_{34}*X^4+C_{33}*X^3+C_{32}*X^2+C_{31}*X+C_{30},$$

when X is in a third range of frequency channels,

where X is one of said frequency channels, Y is the real gain of said selective filter for said frequency channel X and C_{14} , C_{13} , C_{12} , C_{11} , C_{10} , C_{24} , C_{23} , C_{22} , C_{21} , C_{20} , C_{34} , C_{33} , C_{32} , C_{31} and C_{30} are coefficients.